In the Claims:

Claim 1 (currently amended) A dry operated inlet end-box for a mercury cathode chlor-alkali cell comprising a brine feed conduit, a slit for the admission of recycled mercury and at least one internal device for ~~the~~ heat exchange between said brine feed and said recycled mercury.

Claim 2 (original) The end-box of Claim 1 further comprising a bafle for the formation of a mobile film of mercury of predetermined thickness.

Claim 3 (currently amended) The end-box of Claim 1 ~~or 2~~ wherein said at least one internal device comprises a first element for the dispersion of said recycled mercury.

Claim 4 (original) The end-box of Claim 3 wherein said at least one internal device comprises a second element for raising the level of said brine feed.

Claim 5 (currently amended) The end-box of ~~any one of the previous claims~~ Claim 1 wherein said thermal exchange internal device is formed by elements made of or lined with a material chemically resistant in the operating conditions of a chlor-alkali cell, optionally selected from the group comprising titanium and alloys thereof, perfluorinated plastic materials, polycyclopentadiene, polyvinylidenfluoride~~,~~ and polychlorotrifluoroethylene.

Claim 6 (currently amended) The end-box of ~~any one of Claims~~ Claim 3 ~~to 5~~ wherein said first element for the dispersion of mercury consists of a horizontal cylindrical distributor provided with perforations along the lower generatrix.

Claim 7 (currently amended) The end-box of Claim 4 ~~or 5~~ wherein said first element for the dispersion of mercury consists of a horizontal tray provided with lifted edge.

Claim 8 (original) The end-box of Claim 7 wherein said lifted edge provided with at least one multiplicity of upper openings.

Claim 9 (original) The end-box of Claim 8 wherein said upper openings have a passage section of triangular shape.

Claim 10 (original) The end-box of Claim 8 wherein said edge is provided with a double multiplicity of respectively upper and lower openings, optionally having a triangular passage section.

Claim 11 (currently amended) The end-box of method of ~~any one of claims~~ Claim 3 ~~to 10~~ wherein said first element for the dispersion of mercury is connected to a wall of said end-box and said slit is sealed.

Claim 12 (currently amended) The end-box of method of ~~any one of claims~~ Claim 3 ~~to 10~~ wherein said first element for the dispersion of mercury is connected to a coaxial pipe internal to the brine feed conduit and said slit is sealed.

Claim 13 (currently amended) The end-box of method of ~~any one of claims~~ Claim 3 ~~to 10~~ wherein said first element for the dispersion of mercury is connected to a pipe coupled to said slit.

Claim 14 (original) The end-box of method of ~~any one of claims~~ Claim 4 ~~to 13~~ wherein said second element for raising the brine level is a case provided with an overflow.

Claim 15 (original) The end-box of Claim 14 wherein said case is provided with a damper of the falling brine which pours out above said overflow.

Claim 16 (currently amended) The end-box of method of ~~any one of claims~~ Claim 4 ~~to 15~~ wherein said second element for raising the level is connected to the brine feed conduit.

Claim 17 (currently amended) The end-box of method of ~~any one of claims~~ Claim 4 ~~to 16~~ wherein said first element for the dispersion of mercury is inserted inside said second element for raising the level.

Claim 18 (original) The end-box of Claim 17 wherein said first element for the dispersion of mercury is placed below the brine level in said second element.

Claim 19 (currently amended) The end-box of method of Claim 14 ~~or 15~~ wherein the said case for raising the level is provided with one or more ducts for the discharge of mercury containing a level of mercury in the interior.

Claim 20 (original) The end-box of Claim 19 wherein said one or more ducts are made of or lined with electrically non conductive and chemically inert material.

Claim 21 (currently amended) The end-box of ~~any one of the previous claims~~ Claim 1 ~~characterised by being~~ made of metallic material provided with an eboite or rubber coating, or of non metallic material.

Claim 22 (currently amended) The end-box of ~~any one of the previous claims~~ Claim 1 wherein said internal device for the heat exchange is electrically insulated from the chlor-alkali cell.

Claim 23 (currently amended) Mercury cathode chlor-alkali electrolysis cell comprising the inlet end-box of ~~any one of the previous claims~~ Claim 1.

Claim 24 (currently amended) Process of electrolysis of brine for the production of chlorine and caustic soda or potash, comprising ~~the use of the~~ using a cell of Claim 23.

Claim 25 (original) The process of Claim 24 wherein the thermal longitudinal distribution in the cell is uniform.

Cancel **Claim 26**.